IN THE SPECIFICATION:

Please replace paragraph [009] with the following amended paragraph:

[009]   The mixer 208 produces in-phase ("I-channel") output signal 220 and mixer 210 produces quadrature-phase ("Q-channel") output signal 222. The in-phase output signal 220 is then filtered with a low-pass filter ("LPF") 224 to produce the in-phase output signal 226. Similarly, the quadrature-phase output signal 222 is filtered with LPF 228 to produce the quadrature-phase in-phase output signal 230.

Please replace paragraph [013] with the following amended paragraph:

[013]   As an example, a typical high-performance satellite receiver may have a large gain in the range of approximately 40 to 70 decibels ("dB") within its the baseband section. Such a large gain in the baseband typically amplifies any received DC offsets and intrinsic circuit DC offsets to a signal level that may saturate the baseband circuitry in the satellite receiver. The saturated circuitry may resultantly generate harmonics and inter-modulation tones that would unfortunately increase the implementation loss of the satellite receiver. Therefore, in order to improve the performance of direct-conversion receivers, there is a need for a system and method capable of correcting for the DC offset produced in direct-conversion receivers.

Please replace paragraph [019] with the following amended paragraph:

[019]   Therefore, there is a need for a system and method that improves upon the performance of current currently known direct-conversion receivers by correcting for DC offset.

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Please replace paragraph [034] with the following amended paragraph:

[034]   As an example of operation, the direct-conversion receiver 400 receives an input RF
signal 422 from an input transmission line (not shown), which may be a strip-line, wire, coaxial
cable, waveguide, fiber optic line (in the case of a ~~a~~ an optical signal) or other type of signal path
from a receiving antenna. The input RE signal 422 is ~~feed~~ fed into the LNA 406, which
amplifies the input RF signal 422 and produces an amplified RF signal 424 that is capable of
driving the mixer 408. The mixer 408 then receives the amplified RF signal 424 and mixes it
with a frequency reference signal 426 produced by the LO 410, where the frequency reference
signal 426 has a frequency value that is approximately equal to the frequency of the input RF
signal 422. The mixer 408 then produces a mixed output signal 428 that has been down-
converted to approximately baseband and may include numerous frequency harmonics. The
mixed output signal 428 is then passed through the combiner 420 to the LPF 412 in the baseband
section 404. The LPF 412 removes the unwanted frequency harmonics and passes the filtered
signal 430 to the VGA LNA 414. The VGA LNA 414 adjusts the gain of the filtered signal 430
and produces the demodulated output signal 432, which may be passed to other circuitry (not
shown) or components (not shown) in the direct-conversion receiver.

Please replace paragraph [035] with the following amended paragraph:

[035]   The DC-offset Correction System 402 corrects for DC-offset by receiving a portion of
the demodulated output signal 432 through a feedback signal path 434. The demodulated output
signal 432 is ~~feed~~ fed back, via feedback signal path 434, to the integrator 416. The integrator
416 may be a RC type integrator that integrates the demodulated output signal 432 and produces

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a feedback signal 436 that is passed to the attenuator 418. The attenuator 418 then attenuates the feedback signal 436 and produces an attenuated signal 438 that is passed to the combiner 420. The combiner 420 then combines the attenuated signal 420 with the mixed output signal 428 and feeds the resulting combined signal 440 back into the LPF 412.

Please replace paragraph [036] with the following amended paragraph:

[036]   The optional controller 421 may determine the baseband section 404 gain A_{ff}, via a control path (not shown) such as a system communication bus, and adjust the attenuation coefficient k_{fb}, by sending control signals (not shown) to the attenuator 418, so that the attenuation coefficient k_{fb} tracks the base baseband section 404 gain A_{ff}. The controller 421 may be implemented as a typical microcontroller, microprocessor, processor, application specific integrated circuit ("ASIC") and/or digital signal processor ("DSP").

Please replace paragraph [037] with the following amended paragraph:

[037]   In FIG. 5, an example implementation of the DC-offset Correction System 500 within the direct-conversion receiver 502 is shown. The direct-conversion receiver 502 may include the DC-offset Correction System 500 and a baseband section 504, VGA-LNA 506, a mixer 508, and LO 510. The baseband section 504 may include a LPF 512 and VGA-LNA 514 and the DC-offset Correction System 500 may include an integrator 516, attenuator 518, combiner 520 and optional controller 521. The integrator 516 may include an amplifier 522 (such as an Op Amp) with a pair of capacitors (each of value "C") 524 and 526 and a pair of resistors (each of value "R") 528 and 530 configured as an integrator. The DC-offset Correction System 500 502 is a

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DC feedback correction servo-loop capable of producing an attenuation coefficient k_{fb} within the

DC feedback correction servo-loop with the attenuator 518.

Please replace paragraph [048] with the following amended paragraph:

[048]   Therefore, the DC-offset Correction System 500 allows for monolithic IC

implementation of the direct-conversion receiver 502 with a high gain baseband section 504

because of the attenuation coefficient k_{fb} produced by the attenuator 518. As such, the DC-offset

Correction System 500 does not require multiple DC offset servo-loops embedded within the

baseband section 504. Moreover, the attenuation coefficient k_{fb} can be adjusted to track the

baseband section 504 gain A_{ff} in order to maintain a small DC offset settling time and a relative

constant corner frequency. The optional controller 521 may determine the baseband section 504

gain A_{ff}, via a control path (not shown) such as a system communication bus, and adjust the

attenuation coefficient k_{fb}, by sending control signals (not shown) to the attenuator 518, so that

the attenuation coefficient k_{fb} tracks the base baseband section 504 gain A_{ff}. The controller 521

may be implemented as a typical microcontroller, microprocessor, processor, application specific

integrated circuit ("ASIC") and/or digital signal processor ("DSP").